

Appl. No. 10/736,334

Response dated May 12, 2006

Reply to Office Action of November 15, 2005

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A photothermographic material comprising a support having disposed thereon an image-forming layer that contains at least a non-photosensitive organic silver salt, a photosensitive silver halide, a reducing agent for an organic silver salt and a binder, and the material further comprising a compound represented by the following formula (I):



wherein A represents an atomic group having at least two mercapto groups as the substituent; W represents a divalent linking group; n represents 0 or 1; and P represents a pyrazolidone group.

2. (Original) The photothermographic material according to claim 1, wherein the atomic group is a group selected from the group consisting of an alkyl group, an aryl group and a heterocyclic group.

3. (Original) The photothermographic material according to claim 1, wherein the atomic group is a heterocyclic group.

4. (Original) The photothermographic material according to claim 1, wherein the atomic group is an aromatic nitrogen-containing heterocyclic group.

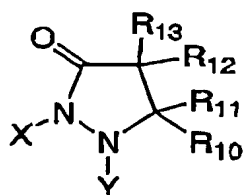
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5. (Original) The photothermographic material according to claim 2, wherein the atomic group is an aromatic nitrogen-containing heterocyclic group.

6. (Original) The photothermographic material according to claim 1, wherein the pyrazolidone group is a group obtained by removing a hydrogen atom from a compound represented by the following formula (P-2):



Formula (P-2)

wherein Y represents a hydrogen atom, an alkyl group, an aryl group or a heterocyclic group; X represents a hydrogen atom, an alkyl group, an acyl group, a carbamoyl group, an alkoxycarbonyl group, an alkylsulfonyl group or an arylsulfonyl group; R₁₀, R₁₁, R₁₂ and R₁₃ each represent a hydrogen atom or a substituent; and wherein at least one of Y, X, R₁₀, R₁₁, R₁₂ and R₁₃ is a hydrogen atom.

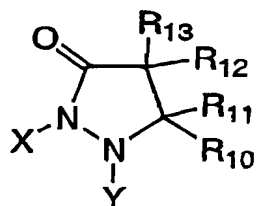
7. (Original) The photothermographic material according to claim 2, wherein the pyrazolidone group is a group obtained by removing a hydrogen atom from a compound represented by the following formula (P-2):

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Formula (P-2)



wherein Y represents a hydrogen atom, an alkyl group, an aryl group or a heterocyclic group; X represents a hydrogen atom, an alkyl group, an acyl group, a carbamoyl group, an alkoxycarbonyl group, an alkylsulfonyl group or an arylsulfonyl group; R₁₀, R₁₁, R₁₂ and R₁₃ each represent a hydrogen atom or a substituent; and wherein at least one of Y, X, R₁₀, R₁₁, R₁₂ and R₁₃ is a hydrogen atom.

8. (Original) The photothermographic material according to claim 1, wherein the pyrazolidone group is a 1-phenyl-3-pyrazolidone group.

9. (Original) The photothermographic material according to claim 2, wherein the pyrazolidone group is a 1-phenyl-3-pyrazolidone group.

10. (Original) The photothermographic material according to claim 1, wherein the photosensitive silver halide has a silver iodide content ranging from 40% by mol to 100% by mol.

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11. (Original) The photothermographic material according to claim 2, wherein the photosensitive silver halide has a silver iodide content ranging from 40% by mol to 100% by mol.

12. (Original) The photothermographic material according to claim 1, wherein the compound represented by formula (I) is added in an amount ranging from 1×10^{-6} mol to 1 mol, per mol of the photosensitive silver halide.

13. (Original) The photothermographic material according to claim 2, wherein the compound represented by formula (I) is added in an amount ranging from 1×10^{-6} mol to 1 mol, per mol of the photosensitive silver halide.

14. (Canceled).

15. (Currently amended) The photothermographic material according to claim ~~14~~ 1, wherein the reducing agent is a hindered phenol-type reducing agent or a bisphenol-type reducing agent.

16. (Canceled).

17. (Currently amended) The photothermographic material according to claim ~~16~~ 2, wherein the reducing agent is a hindered phenol-type reducing agent or a bisphenol-type reducing agent.

18. (Original) The photothermographic material according to claim 1, further comprising a hydrogen bond-forming compound represented by

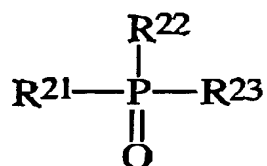
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the following formula (D):

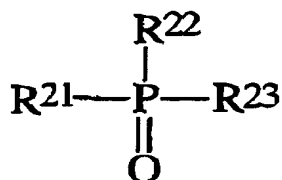
Formula (D)



wherein R^{21} , R^{22} , and R^{23} each independently represent an optionally substituted alkyl, aryl, alkoxy, aryloxy, amino, or heterocyclic group.

19. (Original) The photothermographic material according to claim 2, further comprising a hydrogen bond-forming compound represented by the following formula (D):

Formula (D)



wherein R^{21} , R^{22} , and R^{23} each independently represent an optionally substituted alkyl, aryl, alkoxy, aryloxy, amino, or heterocyclic group.